

CLAIMS:

1. Color display panel comprising:
at least one pixel (1-3) having a sub-pixel circuit (4,5) of a type comprising a light-emitting cell (13;16;28) for emitting light with a first spectral distribution when a voltage in a first operating range is applied, and for emitting light with a second spectral distribution when a voltage in a second operating range is applied, the second spectral distribution differing from the first spectral distribution; and
5 a data line (8;21,22;33,35,41) for passing a signal controlling the emission of light by the light-emitting cell (13; 16; 28) to the sub-pixel circuit (4,5),
the sub-pixel circuit (4,5) further comprising at least two active components
10 (9,10;17,18;29,30) controlled by the signal for applying respective voltages to the cell (13;16;28) in dependence on respective reference voltages.
2. Color display panel according to claim 1, comprising a further data line (21,22;33,35), at least one of the active components (17,18;29,30) in the sub-pixel circuit
15 (4,5) being independently controllable by the signal supplied through an associated one of the data lines (21,22;33,35).
3. Color display panel according to claim 1, further comprising a storage element (26,27;36,37) for maintaining a signal level controlling one of the active components
20 (17,18;29,30) at a level determined by a level of the signal supplied through the data line (8;21,22;33,35) prior to interruption of supply of that signal to the sub-pixel circuit (4,5).
4. Color display panel according to claim 1, wherein the active components (9,10) are comprised in a bi-stable circuit, switchable between two states under control of the
25 signal.
5. Color display panel according to claim 1, wherein a first one of the at least two active components (9;17) is arranged to function as a source of current to the light-emitting

cell (13;16) and a further one of the at least two active components (10;18) is arranged to function as a sink of current from the light-emitting cell (13;16).

6. Color display panel according to claim 2, the sub-pixel circuit (4,5) further
5 comprising a reset switch (40, 42) coupled in parallel with the light-emitting cell (28) for
setting a dark state of the cell (28).

7. Color display panel according to claim 1, comprising at least two sub-pixel
circuits (4,5) of the same type.

10 8. Color display panel according to claim 7, adapted to enable driving of the at
least two sub-pixel circuits (4,5) in a same operating range.

9. Method of driving a color matrix display panel comprising at least one pixel
15 (1-3) having a sub-pixel circuit (4,5) of a type comprising a light-emitting cell (13;16;28) for
emitting light with a first spectral distribution when a voltage in a first operating range is
applied, and for emitting light with a second spectral distribution when a voltage in a second
operating range is applied, the second spectral distribution differing from the first spectral
distribution, and a data line (8;21,22;33,35,41), the method comprising the steps of:

20 - passing a signal controlling the emission of light by the light-emitting cell (13;16;28) to the
sub-pixel circuit (4,5) via the data line (8;21,22;33,35,41); and
- applying respective voltages to the cell (13;16;28) in dependence on respective reference
voltages via at least two active components (9,10;17,18;29,30) controlled by the signal.

25 10. Method according to claim 9, comprising supplying the signal to the
corresponding one of the active components (17,18;33,35) at a level in dependence on
information characterizing the corresponding active component (17,18;29,30).

11. Method according to claim 9, comprising supplying at least one pre-
30 conditioning pulse to the sub-pixel circuit (4,5) for setting the respective voltages to a value
within a sub-range at a substantially extreme end of an operating range furthest removed
from the other operating range.

12. Display system comprising a color matrix display panel comprising at least one pixel (1-3) having a sub-pixel circuit (4,5) of a type comprising a light-emitting cell (13;16;28) for emitting light with a first spectral distribution when a voltage in a first operating range is applied, and for emitting light with a second spectral distribution when a 5 voltage in a second operating range is applied, the second spectral distribution differing from the first spectral distribution, the system comprising means for carrying out a method according to claim 9.

13. Program having means for enabling a programmable device to carry out a 10 method according to claim 9.